



**NOTES**

Company: American Warrior, Inc.

Lease: Handy 8-29

Field: Blue Bell

Location: SW-NW-NE-SW

Sec: 29 Twsp: 34S Rge: 31W

County: Seward State: Kansas

KB: 2741' GL: 2728'

API #: 15-175-22219-00-00

Contractor: Duke Drilling Inc. (Rig #9)

Spud: 06/16/2014 Comp: 06/28/2014

RTD: 6500' LTD: 6501'

Mud Up: 4200' Type Mud: Chemical

Samples Saved From: 4300' to RTD  
 Drilling Time Kept From: 4300' to RTD  
 Samples Examined From: 4300' to RTD  
 Geological Supervision from: 4300' to RTD  
 Geologist on Well: Wyatt Urban

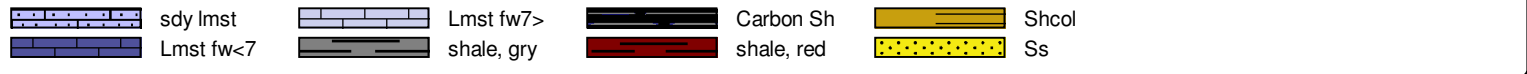
Surface Casing: 8 5/8@1705'

Electronic Surveys: Logged by Pioneer Energy; DIL, MEL, CDL/CNL,

# American Warrior Well Comparison

DRILLING WELL				COMPARISON WELL				COMPARISON WELL				
American Warrior-Handy 8-29 SW-NW-NE-SW 29-34S-31W				American Warrior-Handy 7-29 SE-NW-NW-SW 29-34S-31W				Charter Production-Sprinkle #1 C-NW-NW 29-34S-31W				
2741 KB				2735 KB				2729 KB				Structural Relationship
Formation	Sample	Sub-Sea	Loq	Sub-Sea	Sample	Sub-Sea	Sample	Loq	Loq	Sub-Sea	Sample	Loq
Heebner	4401	-1660	4400	-1659	4394	-1659	-1	0	4369	-1640	-20	-19
Toronto	4417	-1676	4425	-1684	4408	-1673	-3	-11	4388	-1659	-17	-25
Lansing	4557	-1816	4556	-1815	4556	-1821	5	6	4535	-1806	-10	-9
Marmaton	5242	-2501	5245	-2504	5244	-2509	8	5	5220	-2491	-10	-13
Morrow	5793	-3052	5781	-3040	5789	-3054	2	14	5758	-3029	-23	-11
Morrow Sd.	5827	-3086	5837	-3096	5826	-3091	5	-5	5804	-3075	-11	-21
Chester	5924	-3183	5917	-3176	5924	-3189	6	13	5909	-3180	-3	4
Ste. Gen	6222	-3481	6222	-3481	6229	-3494	13	13	6211	-3482	1	1
St. Louis	6352	-3611	6352	-3611	6325	-3590	-21	-21	6310	-3581	-30	-30
RTD	6500	-3759	6500	-3759	6500	-3765	6	6	6470	-3741	-18	-18
LTD	6501	-3760	6501	-3760	6503	-3768	8	8				

**ROCK TYPES**



**ACCESSORIES**

**MINERAL**  
P Pyrite

**FOSSIL**  
Oolite  
Oomoldic

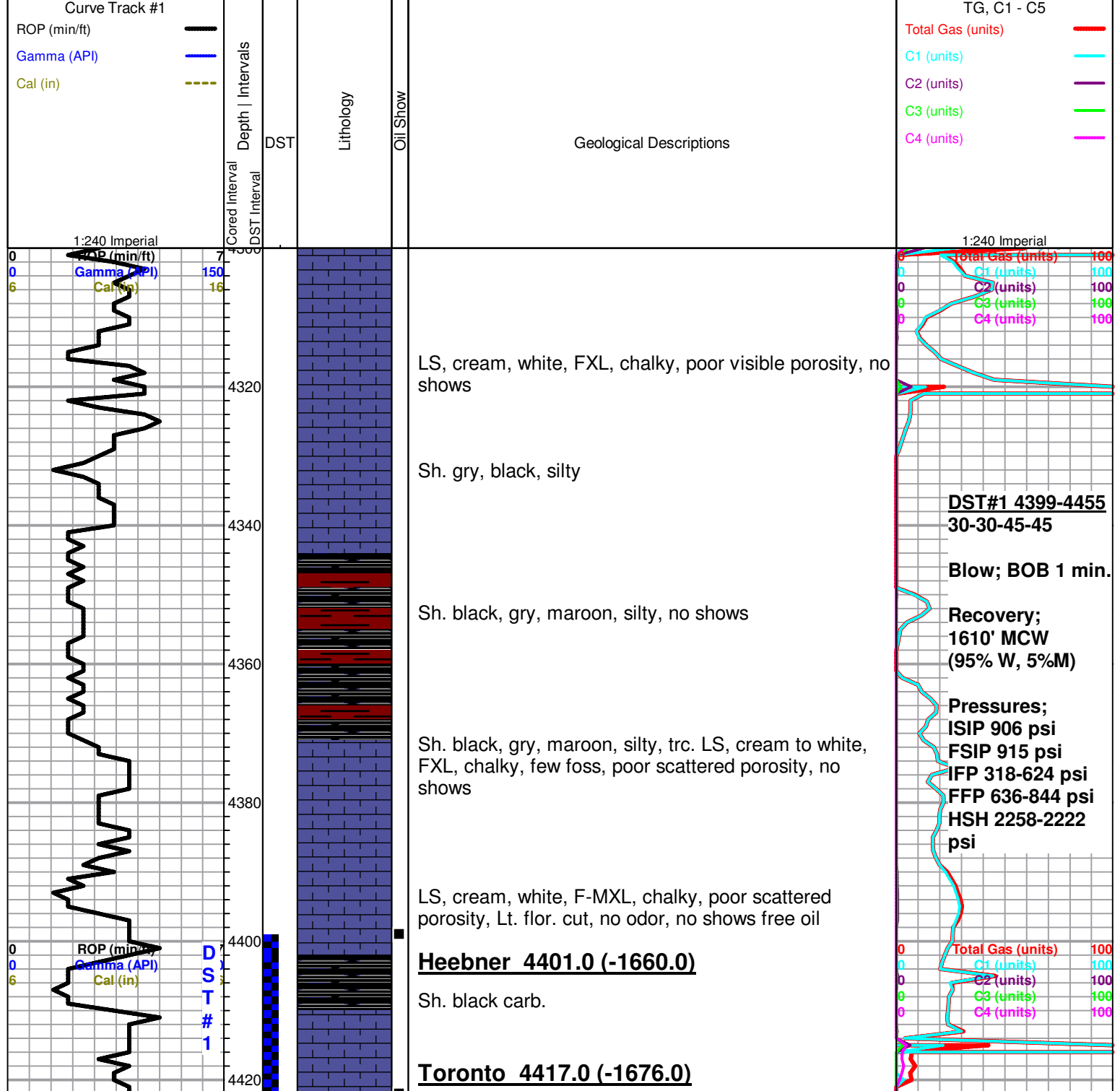
**STRINGER**  
Sandstone

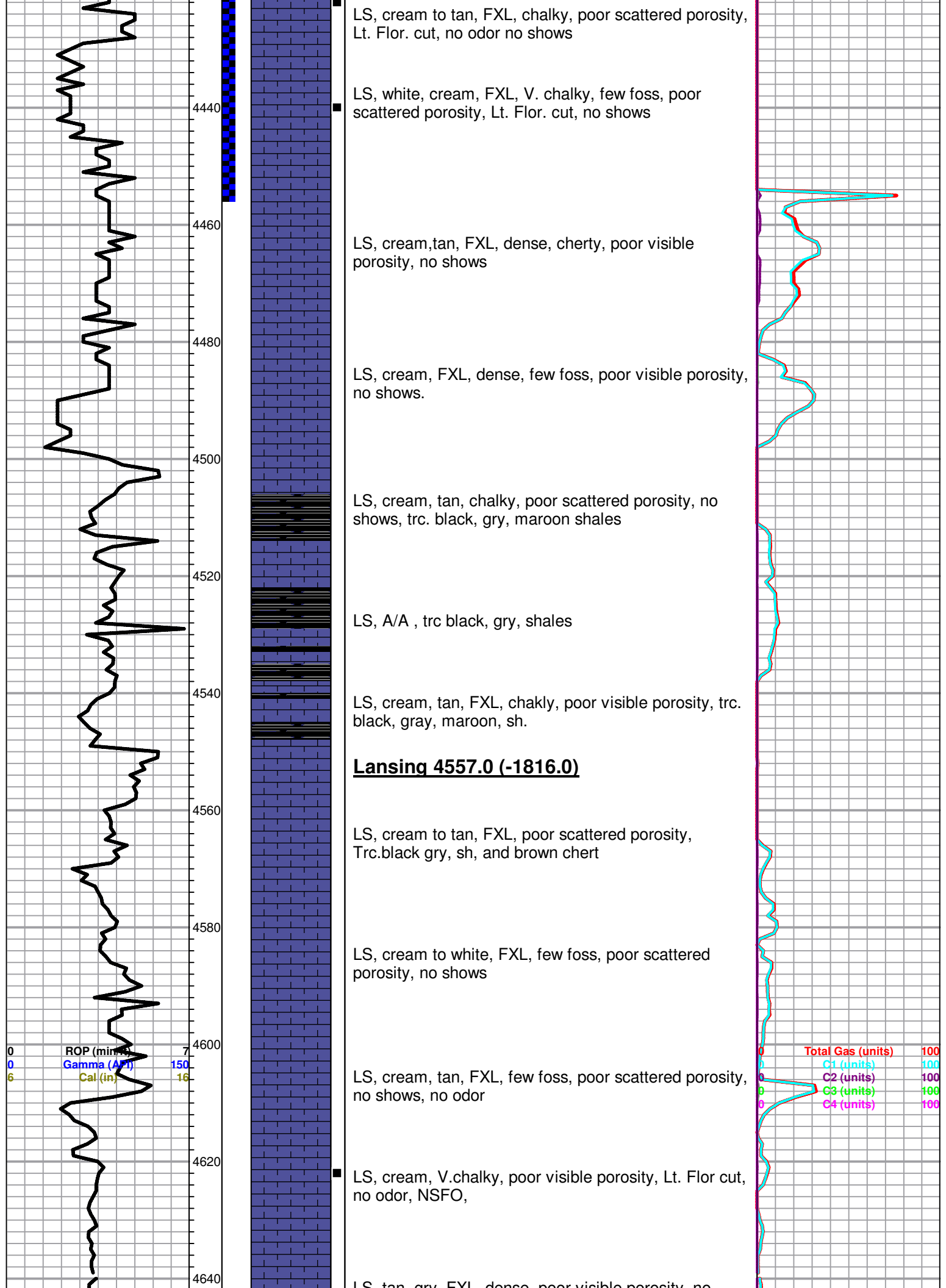
**OTHER SYMBOLS**

**Oil Show**  
● Good Show  
● Fair Show  
● Poor Show  
○ Spotted or Trace  
○ Questionable Strn  
D Dead Oil Strn  
■ Fluorescence  
\* Gas

**DST**  
DST Int  
DST alt  
Core  
tail pipe

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)





4440

LS, cream to tan, FXL, chalky, poor scattered porosity, Lt. Flor. cut, no odor no shows

4460

LS, white, cream, FXL, V. chalky, few foss, poor scattered porosity, Lt. Flor. cut, no shows

4480

LS, cream,tan, FXL, dense, cherty, poor visible porosity, no shows

4500

LS, cream, FXL, dense, few foss, poor visible porosity, no shows.

4520

LS, cream, tan, chalky, poor scattered porosity, no shows, trc. black, gry, maroon shales

4540

LS, A/A , trc black, gry, shales

4560

LS, cream, tan, FXL, chalky, poor visible porosity, trc. black, gray, maroon, sh.

**Lansing 4557.0 (-1816.0)**

4580

LS, cream to tan, FXL, poor scattered porosity, Trc.black gry, sh, and brown chert

4600

LS, cream to white, FXL, few foss, poor scattered porosity, no shows

ROP (min) 7  
 Gamma (API) 150  
 Cal (in) 16

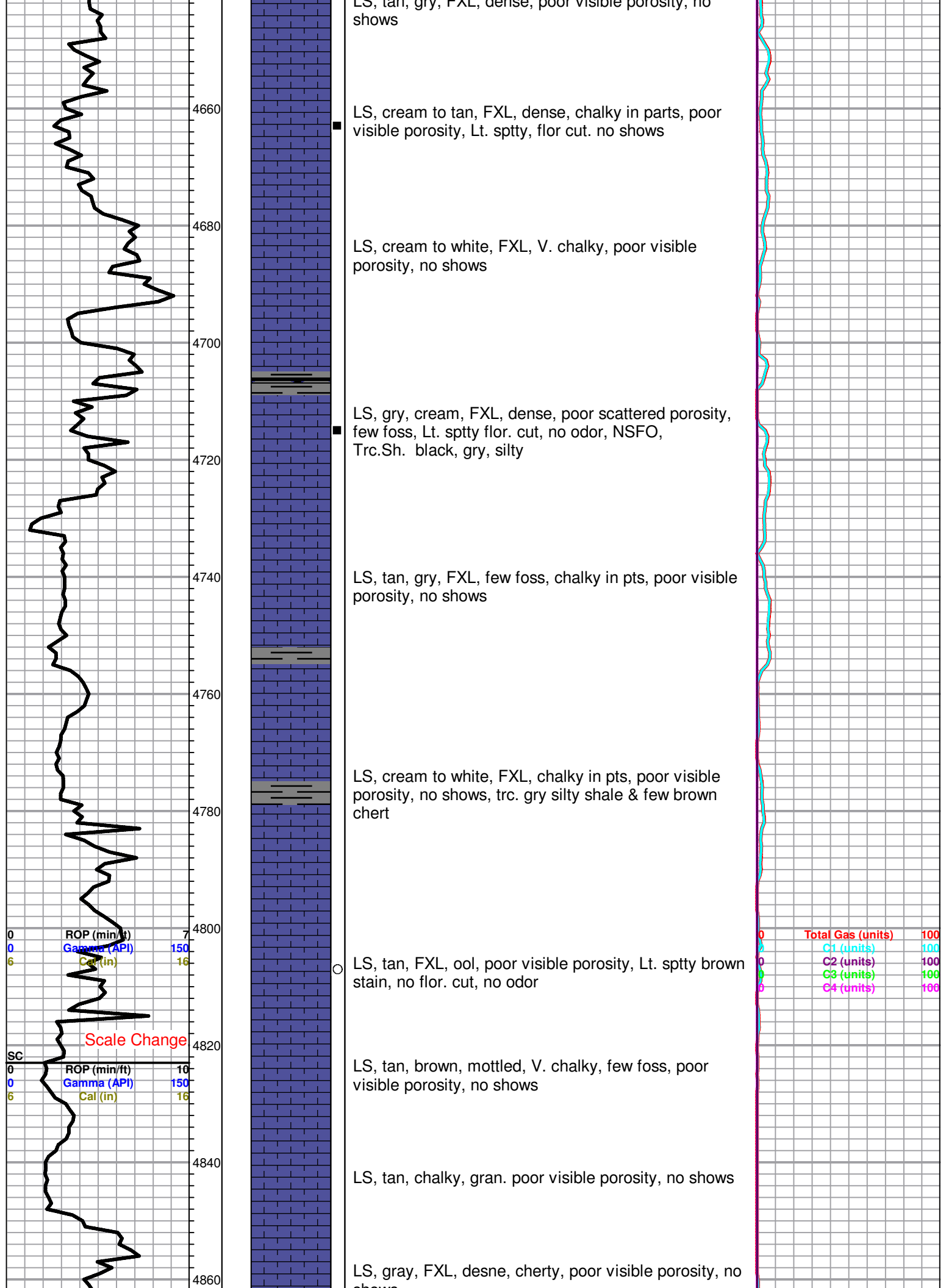
4620

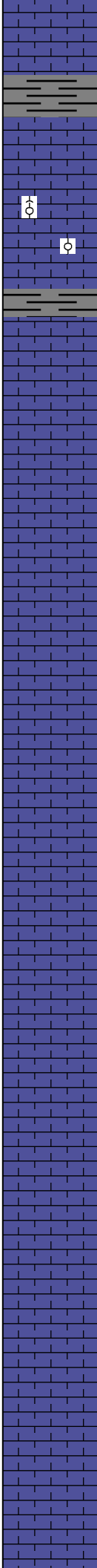
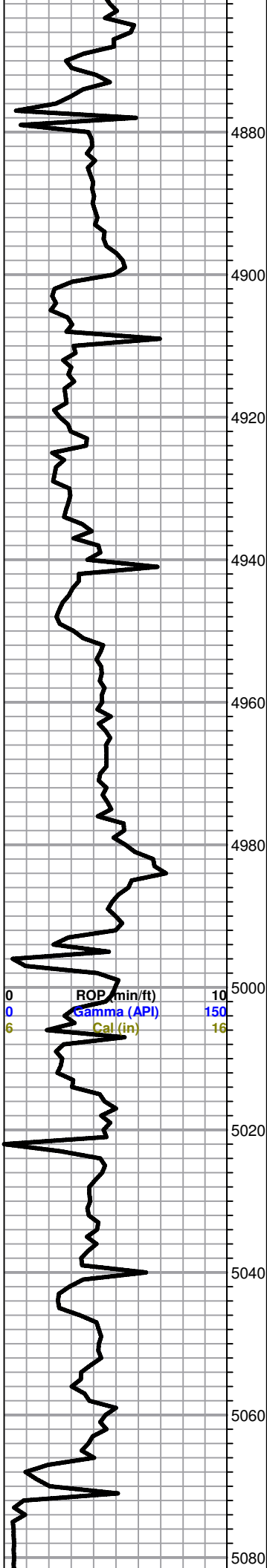
LS, cream, tan, FXL, few foss, poor scattered porosity, no shows, no odor

4640

LS, cream, V.chalky, poor visible porosity, Lt. Flor cut, no odor, NSFO,

Total Gas (units) 100  
 C1 (units) 100  
 C2 (units) 100  
 C3 (units) 100  
 C4 (units) 100





snows  
 LS, brown, FXL, cherty, dense, poor visible porosity, no shows trc gry silty shale

LS, gry, tan, FXL, few ool, poorly developed, few scattered vuggy porosity, no shows, no flor.

LS, cream to tan, FXL, Sl. chalky in pts, few foss, poor scattered porosity, no shows

LS, gry, tan, FXL, dense, poor visible porosity, few foss, poor scattered porosity, trc. black carb sh.

LS, tan, FXL, dense, poor visible porosity, no shows,

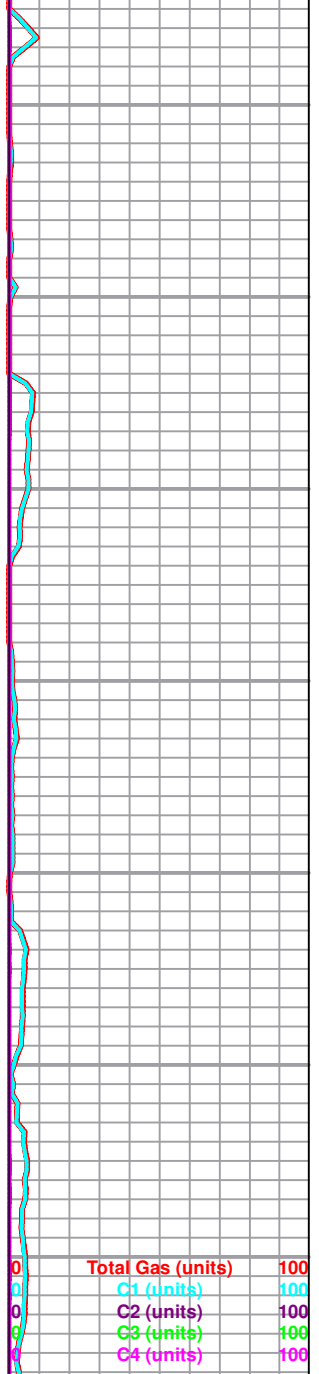
LS, tan, brown, F-MXL, chalky, earthy,

Sh. black carb, gry, silty sh.

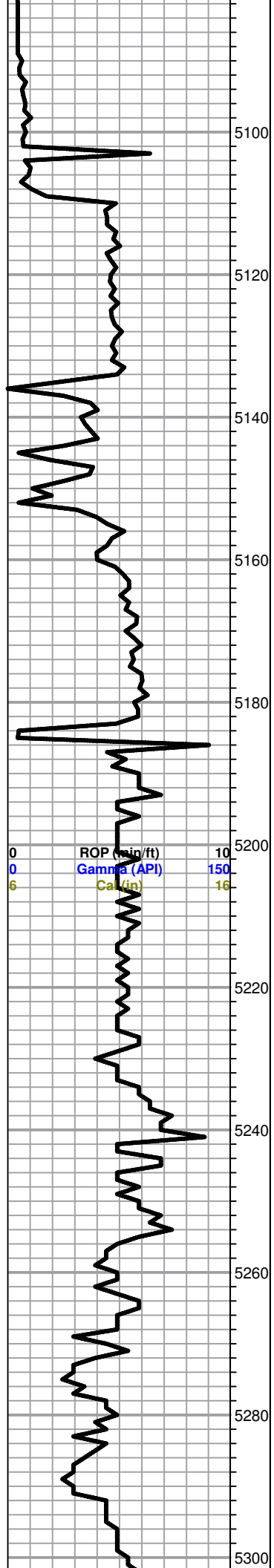
LS, cream tan, ool, poorly developed, poor scattered porosity, V. chalky, no shows

LS, tan, cream, mottled, F-MXL, chalky, few foss, poor visible porosity, no shows

LS, gry, FXL, cherty, dense, poor visible porosity, no shows



Total Gas (units) 100  
 C1 (units) 100  
 C2 (units) 100  
 C3 (units) 100  
 C4 (units) 100



0 ROP (min/ft) 10  
 0 Gamma (API) 150  
 6 Cal (in) 16

LS, tan, brown, oom, good vuggy porosity, chalky in parts, no shows

LS, white, tan, oom, good vuggy porosity, chalky, trc. Sd. tan, m. grain, well sorted, Lt. spotty, flor. NSFO, no odor

LS, tan, brown, FXL, dense, cherty, poor visible porosity, no shows

LS, tan, brown, mottled, FXL, dense, poor visible porosity, no shows

LS, tan, brown, FXL, dense, cherty in pts, poor visible porosity, no shows  
Trc. gry, black carb sh.

LS, tan to brown, FXL, dense, poor visible porosity, no shows,

Slug gry, black carb Sh.

**Marmaton 5242.0 (-2501.0)**

LS, tan, brown, gry, FXL, poor visible porosity, no shows

LS, cream, tan, gry, FXL, Sl. chalky in pts, poor scattered porosity, no shows

LS, tan, brown, ool, FXL, chalky, poor scattered porosity, no shows.

SC

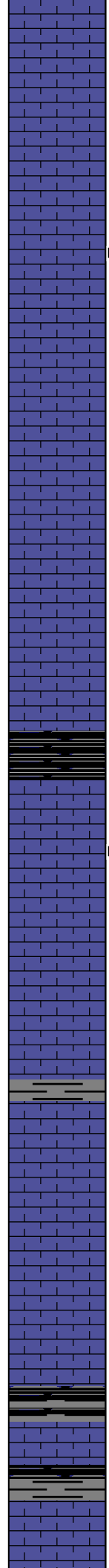
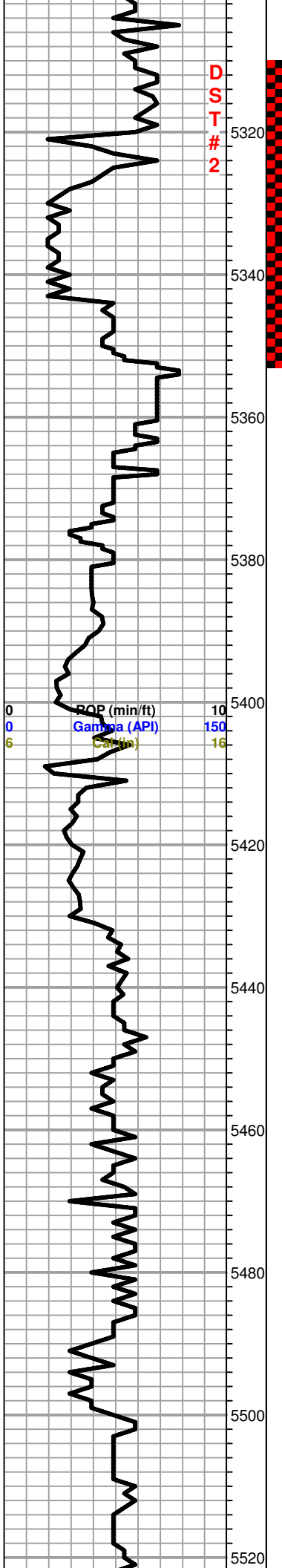
Total Gas (units)	50
C1 (units)	50
C2 (units)	50
C3 (units)	50
C4 (units)	50

Total Gas (units)	50
C1 (units)	50
C2 (units)	50
C3 (units)	50
C4 (units)	50

**DST#2 5311-5349**  
**30-30-45-45**

**Blow; BOB 5 min.**

**Recovery;**  
**1260 MCW**  
**(97%W, 3%M)**



LS, tan, brown, gry, FXL, foss, dense, poor visible porosity, no shows no odor.

LS, cream to tan, F-MXL, few ool, chalky, poor scattered porosity, Lt. spty flor. cut, no odor, NSFO

LS, cream to tan, FXL, few foss, poor scattered porosity, no shows, no flor. cut.

LS, tan, brown, FXL, cherty, poor visible porosity, trc. lt. flor. cut, no odor, no stains

**Cherokee 5410.0 (-2669.0)**

Black carb Sh.

LS, tan, brown, F-MXL, chalky, few ool, poorly developed, poor visible porosity, Lt. spty flor. cut, no odor, no stain

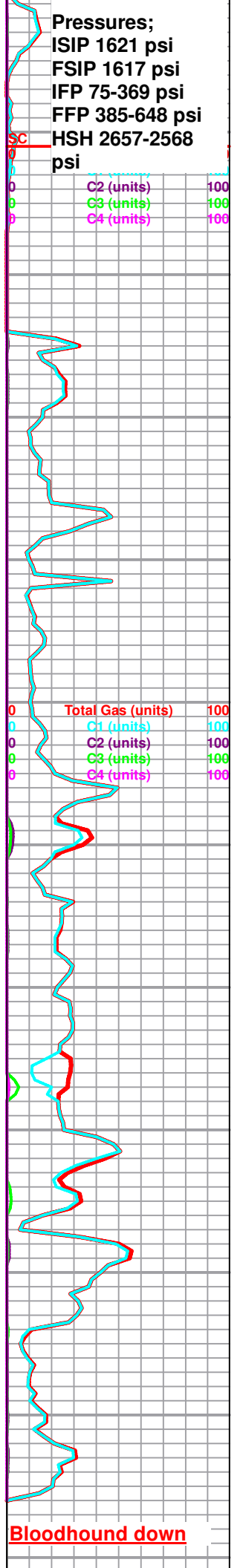
LS, cream to tan, FXL, desen, few foss, poor visible porosity, no shows,

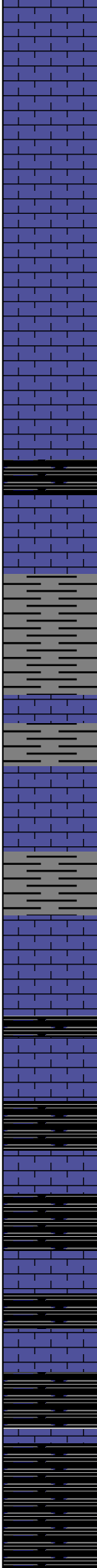
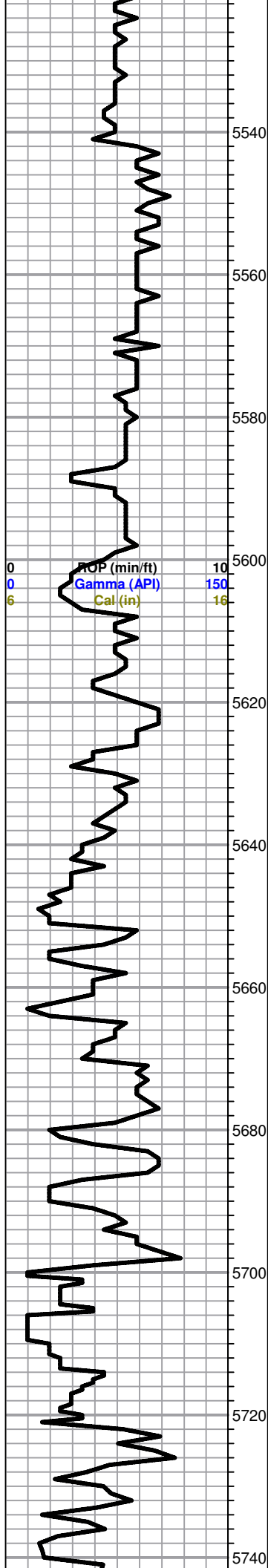
LS A/A, Trc. black, gry, shales

LS, gry, tan, earthy, chalky in parts, poor visible porosity no shows, no flor. no odor

Sh. gry, black, silty in parts,

LS, cream, tan, mottled, FXL, poor visible porosity, cherty in parts, no shows





LS, tan, brown, FXL, dense, poor visible porosity, few foss, no shows, trc. black, maroon silty shale

LS, tan, gry, FXL, dense, cherty, poor visible porosity, no shows

Black carb sh.

LS, cream, brown, FXL, dense, cherty no shows

Sh. black, gry, silty

Sh. black, gry, silty, Trc. LS, tan, cream, FXL, chalky, poor visible porosity, no shows

Sh. black carb, gry, silty, Trc. LS, white cream, FXL, chalky poor visible porosity, no shows

LS, tan, brown, FXL, cherty dense, poor visible porosity, no shows, Trc. Black carb Sh.

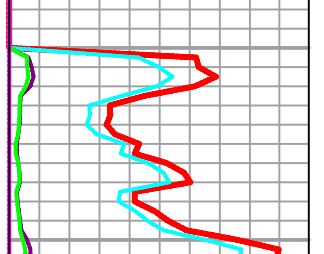
LS, tan, cream, FXL, dense, cherty, poor scattered porosity, no shows

Black carb. Sh.

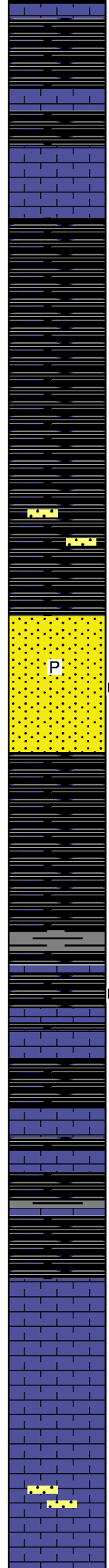
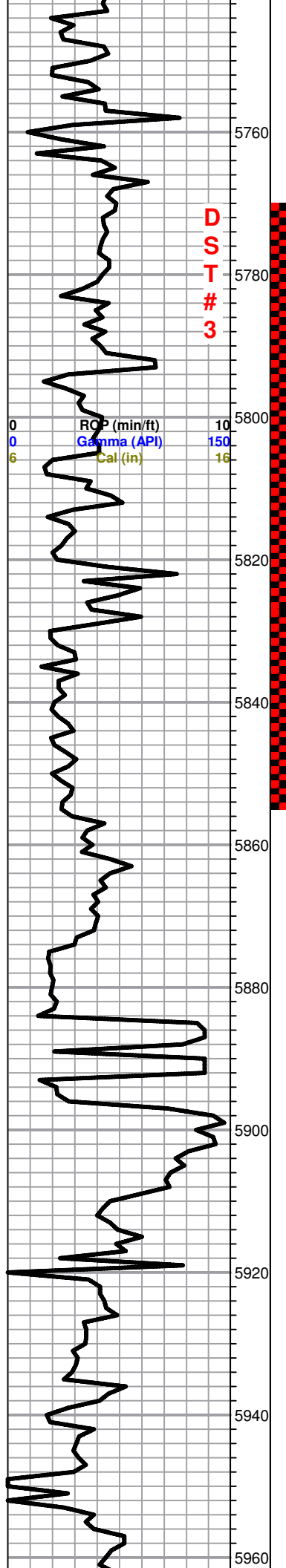
Black carb. Sh.  
Trc. LS, tan, brown, mottled, FXL, dense, poor visible porosity, no shows

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

SC	Total Gas (units)	150
0	C1 (units)	150
0	C2 (units)	150
0	C3 (units)	150
0	C4 (units)	150







Black carb Sh. trc. LS, cream to tan, FXL, chalky in parts, poor visible porosity, no shows

Black carb Sh. trc. LS, A/A, trc. few sd. white, V.F. grain, well sorted, no shows, no flor. cut

**Morrow 5793.0 (-3052.0)**

Sh. black carb. gray silty, Trc. LS, tan ool, V. chalky, poorly developed, poor scattered porosity, no shows no flor.

Sh. black carb. few maroon, Trc. Sd. tan, F. grain, well sorted, no shows, no flor. cut

Sh. A/A, Sd. white, gry, F.-M. grain, well sorted, sub angular, Lt. flor. cut, trc. pyrite

Sh. black carb, maroon, greenish, silty in pts

Sh. A/A, trc. LS, cream to white, V. chalky, poor visible porosity, no shows

LS, cream to white, V. chalky, fair scattered porosity, fair flor. cut, no odor

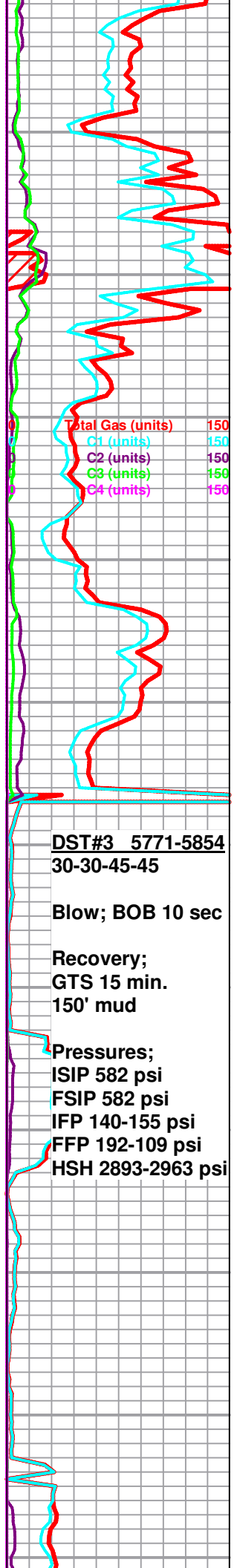
Sh. black, gry, maroon, silty in parts, trc. LS, white, FXL, few ool, poorly developed, V.chalky, poor scattered porosity, Lt. flor. cut, no odor, no shows

Black carb. Sh.

**Chester 5924.0 (-3183.0)**

LS, tan, brown, FXL, dense, cherty, poor visible porosity, no shows, no odor

LS, cream to tan, chalky, poor visible porosity, trc. Sd. white to gry, med, grain, sub rounded, well sorted, no shows



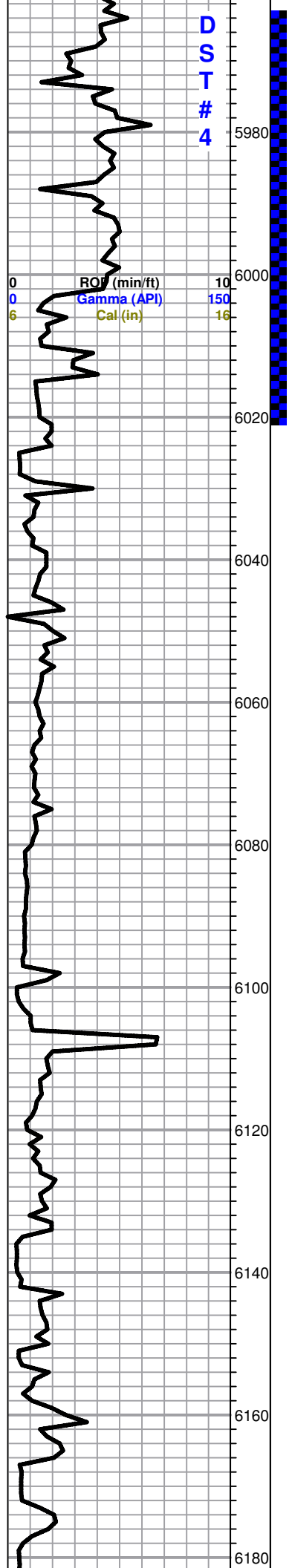
**DST#3 5771-5854**  
30-30-45-45

**Blow; BOB 10 sec**

**Recovery;**  
GTS 15 min.  
150' mud

**Pressures;**  
ISIP 582 psi  
FSIP 582 psi  
IFP 140-155 psi  
FFP 192-109 psi  
HSH 2893-2963 psi

D  
S  
T  
#  
4



LS, cream tan, FXL, few foss, chalky, poor scattered porosity, Lt. flor. cut, no odor

LS, tan, brown, FXL, foss, poor scattered porosity, fair flor. cut. odor???,

LS, cream to tan, FXL, chalky, foss, good flor. cut, odor???,

LS, A/A

LS, cream to tan, FXL, chalky, poor visible porosity, no shows

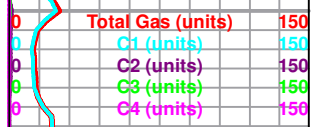
LS, tan, FXL, ool, poorly developed, poor scattered porosity, no shows

LS, tan to brown, FXL, dense, chalky in parts, no shows

LS, tan, brown, FXL, cherty in parts, foss, poorly scattered porosity, no shows

LS, cream to white, ool, poor developed, chalky, Lt. flor. cut, trc. black stain, NSFO, no odor

Sh. gry, greenish, maroon,



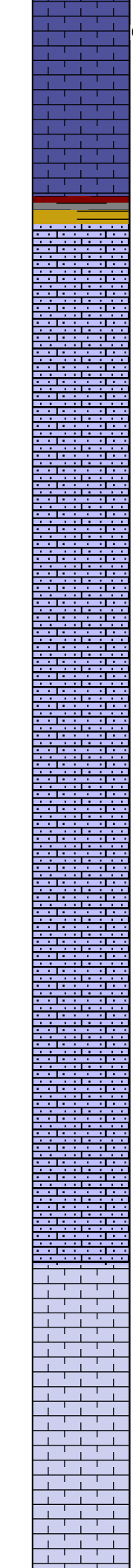
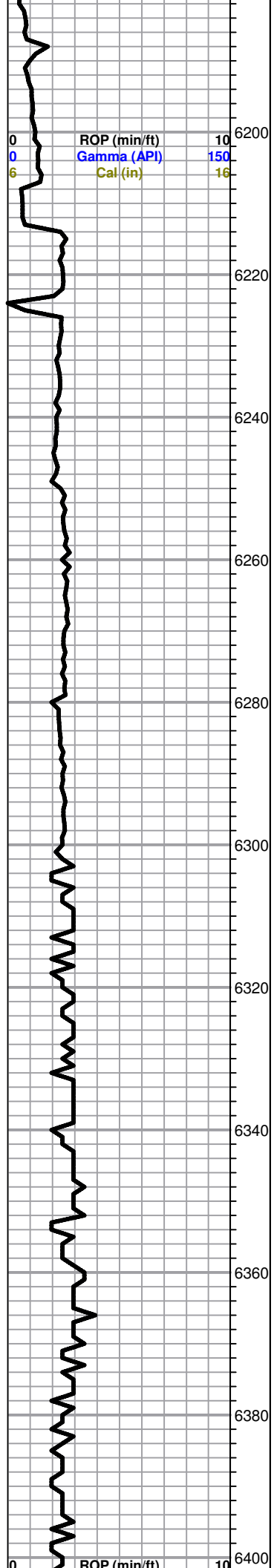
**Continue Drilling with PDC bit**

**DST#4 5963-6020**  
**30-30-45-45**

**Blow; BOB 30 sec.**

**Recovery; GTS 190' WCM**

**Pressures; ISIP 954 psi  
FSIP 777 psi  
IFP 106-101 psi  
FFP 101-112 psi  
HSH 2924-2884 psi**



LS, tan, micr ool, friable, trc. black stain, NSFO, no odor

LS, tan, brown, Micro ool, no shows, Slug, Sh. maroon, greenish, purple

**St. Gen 6222.0 (-3481.0)**

LS, A/A

LS, cream to white, mirco ool, no shows,

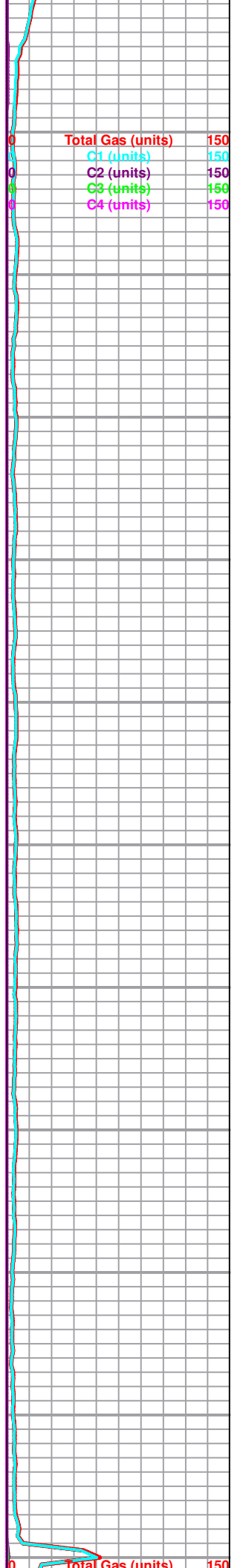
LS, cream, tan, micro ool, friable, no shows, no odor

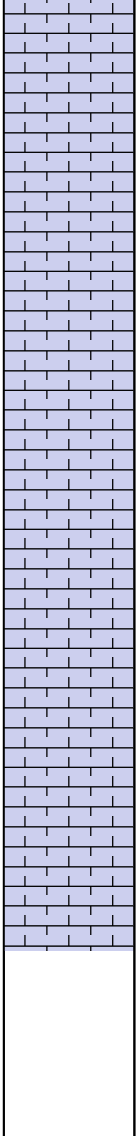
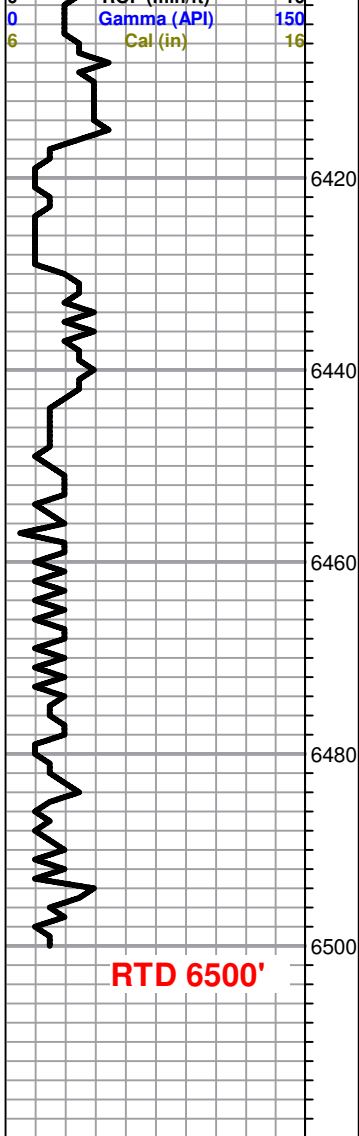
LS, tan, brown, cream, micro ool, friable, no shows

**St. Louis 6352.0 (-3611.0)**

LS, cream to white, FXL, chalky, few ool, poorly developed, no shows

LS, a/a





LS, cream, white, ool, poorly developed, poor scattered porosity, chalky, no shows,

LS, white, cream to white, FXL, few ool, chalky, poor visible porosity, no shows

LS, cream to white, FXL, chalky, poor visible porosity, few ool, no shows,

**RTD 6500'**

